

## REMARKS

The present amendment and remarks are in response to the Office Action mailed March 20, 2002. Claims 3, 12-37 and 39-63 are pending in the application. Claims 23-33 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Claims 3, 12-15, 17-18, 20-23, 28, 34-37, 39-42, 44-45, 47-50, 55 and 61-63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,809,144 to *Sirbu et al.* in view of U.S. Patent No. 5,774,870 to *Storey* and U.S. Patent No. 5,903,652 to *Mital*. Claims 16 and 43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Storey* and *Mital* and further in view of U.S. Patent No. 5,860,068 to *Cook*. Claims 26 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Storey* and *Mital* and further in view of U.S. Patent No. 5,794,210 to *Goldhaber*. Claims 3, 12-15, 17-22, 37, 39-42, and 44-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of U.S. Patent No. 5,855,007 to *Jovicic et al.* in view of *Mital*. Claims 23-25, 28-33, 50-52, and 55-60 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Jovicic et al.* and *Mital* and further in view of U.S. Patent No. 5,710,886 to *Christensen et al.* Claims 3, 13-15, 17-18, 20-22, 37, 40-42, 44-45 and 47-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Goldhaber* and *Mital*. Claims 23, 26-27, 50, and 53-54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Goldhaber* and *Mital* and further in view of *Christensen et al.* Claims 3 and 37 have been amended. Attached hereto is a marked-up version of the changes made to the specification and the claims by the current amendment. The marked-up version is captioned **"Versions with Markings to Show Changes Made."** In light of these changes and for the reasons set forth below Applicants respectfully submit that all pending claims are in condition for allowance.

Claims 23-33 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner asserts that "the digital coupon" on line 1 of claim 23 does not have proper antecedent basis. However, claim 3 has been amended to indicate the coupon claimed is in fact "a digital coupon". Claims 23-33 all depend either directly or indirectly from claim 3. Accordingly, Applicants respectfully submit that "the digital coupon"

does have proper antecedent basis, and request that the rejection of claims 23-33 under 35 U.S.C. § 112 be withdrawn.

Claims 3, 12-15, 17-18, 20-23, 28, 34-37, 39-42, 44-45, 47-50, 55 and 61-63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,809,144 to *Sirbu et al.* in view of U.S. Patent No. 5,774,870 to *Storey* and U.S. Patent No. 5,903,652 to *Mital*. Of the pending claims, claims 3 and 37 are the only independent claims. Claim 3 relates to an electronic commerce system and claim 37 relates to a method performing steps to implement an electronic commerce system substantially similar to the electronic commerce system of claim 3. Both claim 3 and claim 37 require a client computer interconnected to a server computer via a public packet switched communications network. The client computer transmits an order acceptance request to the server computer. The order acceptance request includes a plurality of terms or conditions of a proposed offer for a purchase. Examples of these terms and conditions include an intended method of payment, time of payment, payment guarantee conditions, shipping methods, time and place of delivery, insurance coverage, risk-of-loss provisions, cancellation policies, goods acceptance criteria, and the like.

Further, the order acceptance request includes a discrete message having a plurality of modular elements. The individual integrity of each of the modular elements is protected by cryptographic security codes embedded within each of the modular elements. The cryptographic security codes are embedded within each of the modular elements to enable the client computer and the server computer to efficiently store and forward the modular elements together with their protection codes. At least one of the modular elements individually protected by a cryptographic security code is a digital coupon. Thus, for example, a digital coupon received by the client computer from a third party may be protected and later verified using the embedded cryptographic security codes.

The server computer processes the order acceptance request based on pre-programmed criteria. The server computer also authenticates the cryptographic security codes embedded within each of the modular elements and examines the modular elements of the discrete message individually protected by the cryptographic security codes. Based on the processing of the order acceptance request, the server computer transmits to the client computer an order acceptance response based on the pre-programmed criteria. The order acceptance response includes a discrete message transmitted during a negotiation phase of a transaction that includes a plurality

of modular elements. The integrity of each of the modular elements is individually protected by cryptographic security codes embedded within each of the modular elements. Again, he cryptographic security codes being embedded within each of the modular elements enables the client computer and the server computer to efficiently store and forward the modular elements together with their protection codes.

None of the cited references teach or suggest an electronic commerce system having a plurality of modular elements as required by the claimed invention. Further, none of the cited references teach or suggest embedding a cryptographic security code within each of the modular elements to protect the integrity of the modular element. Moreover, none of the cited references teach or suggest that at least one of the modular elements having a cryptographic security code embedded within the modular element is a digital coupon.

The Examiner asserts that *Sirbu et al.* disclose an electronic commerce system having features similar to the claimed invention. However, the Examiner admits that *Sirbu et al.* do not disclose, nor do they teach or suggest, that the message transmitted between the client computer and the server computer includes a plurality of modular elements. Further, *Sirbu et al.* clearly do not disclose that the integrity of each of the plurality of modular elements is individually protected by cryptographic security codes that are embedded within each of the modular elements, nor do *Sirbu et al.* disclose that at least one these modular elements is a digital coupon. To remedy the deficiencies of *Sirbu et al.*, the Examiner relies on *Storey* and *Mital*.

The Examiner asserts that *Storey* teaches the use of a digital coupon to provide discounts to special groups. This assertion is incorrect. First, *Storey* discloses only the use of a gift certificate which is merely one type of digital coupon. The claimed invention relates to a digital coupon, and a gift certificate is merely one embodiment claimed in dependent claims of the claimed invention, such as claim 23. Second, the gift certificate disclosed by *Storey* is the subject of the transaction, that is, "the user has the option to purchase a gift certificate rather than purchasing an actual product." See, *Storey*, Col. 6, Line 67 to Col. 7, Line 1. Thus, the gift certificate disclosed by *Storey* is the subject of the purchase transaction and not a modular element contained within a discrete message of an order acceptance request and an order acceptance response as required by the claimed invention. Accordingly, the claimed invention relates to the verification and redemption of a digital coupon as part of an electronic commerce

no  
see  
col. 2  
lines  
16-27

system while *Storey* discloses nothing more than the purchase of a gift certificate and does not speak to the redemption of the gift certificate.

Furthermore, one of ordinary skill in the art would not have been motivated to combine *Storey* with *Sirbu et al.* *Sirbu et al.* disclose a method and apparatus for purchasing and delivering digital goods over a network. In contrast, *Storey* discloses an award program that rewards users with bonus points immediately upon purchase of merchandise, that is, a frequent shopper reward program. Thus, Applicants question why one of ordinary skill in the art would be motivated to combine the frequent shopper reward program of *Storey* with the method and apparatus for purchasing and delivering digital goods over a network disclosed by *Sirbu et al.* Furthermore, even if combined, *Storey* and *Sirbu et al.* do not teach or suggest the claimed invention, especially a plurality of modular elements whose individual integrity is protected by embedding a cryptographic security code within each modular element. Combining *Storey* and *Sirbu et al.* might result in a method and apparatus for purchasing and delivering digital goods over a network that rewards shoppers for their purchase, but it does not teach or suggest the features of the claimed invention.

The Examiner asserts that *Mital* teaches a secured transaction system wherein the message transmitted between the client computer and the server computer includes a plurality of individually protected modular elements. This assertion is incorrect. First, amended claims 3 and 37 both require a discrete message including a plurality of modular elements whose individual integrity is protected by cryptographic security key codes embedded within each modular element. *Mital* does not teach this feature. Second, *Mital* does not teach or suggest a plurality of modular elements. The passage cited by the Examiner discusses a “secured transaction system that individually encrypts (1) goods and service information, (2) payment instructions, and (3) audit information.” *Mital* explains at column 7, lines 55-65 that

the goods and services order specifies details about the purchased goods, the identity of the merchant selling the goods, shipping instructions, etc. ... [while the] payment instructions preferably contain the cost of the goods, the purchaser's credit account, credit card number, etc. ... [and] the audit information preferably specifies the identity of the merchant and contains other general information about the price and quantity of items purchased.

As discussed above, items such as shipping instructions and methods, an intended method of payment, and the like are terms or conditions of the order acceptance request. Applicants respectfully submit that the goods and service order, the payment instructions and the audit

information disclosed by *Mital* are merely terms or conditions of the purchase. As such, they are not the modular elements required by the claimed invention. Thus, *Mital* does not teach or suggest individually protecting the integrity of modular elements by embedding cryptographic security codes within each of the modular elements as required by the claimed invention. Accordingly, even if one skilled in the art were to combine *Mital* with *Storey* and *Sirbu et al.*, the claimed invention does not result. Applicants respectfully submit that the examiner has failed to establish a prima facie case of obviousness and request that the rejection of claims 3, 12-15, 17-18, 20-23, 28, 34-37, 39-42, 44-45, 47-50, 55 and 61-63 be withdrawn.

Claims 16 and 43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Storey* and *Mital* and further in view of U.S. Patent No. 5,860,068 to *Cook*. The Examiner primarily relies on *Sirbu et al.*, *Storey* and *Mital* for support of the rejection and therefore relies on *Cook* to remedy the deficiencies of *Sirbu et al.*, *Storey* and *Mital*. Claims 16 and 43 depend indirectly from independent claims 3 and 37, respectively. As previously discussed, *Sirbu et al.*, *Storey* and *Mital* fail to teach or suggest a number of features of the claimed invention as required by amended claims 3 and 37. Among the claimed features not taught or suggested by *Sirbu et al.*, *Storey* and *Mital* is an electronic commerce system including a plurality of modular elements having cryptographic security codes embedded within each of the modular elements to protect the individual integrity of each of the modular elements. *Cook* is cited merely for disclosing a SSL connection. *Cook* does not disclose the modular element features absent from *Sirbu et al.*, *Storey* and *Mital*. Therefore, even if one of ordinary skill in the art would have been motivated to combine the teaching of *Cook* with that of *Sirbu et al.*, *Storey* and *Mital* (a point not conceded by Applicants), the resulting combination nonetheless fails to teach or suggest every element of the claimed invention. As such, the Examiner has failed to establish a prima facie case of obviousness and claims 16 and 43 must be allowed.

Further, claims 26 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Storey* and *Mital* and further in view of U.S. Patent No. 5,794,210 to *Goldhaber*. *Sirbu et al.*, *Storey* and *Mital* are the primary references supporting the Examiner's rejection. Claims 26 and 53 depend indirectly from independent claims 3 and 37, respectively. As discussed above, *Sirbu et al.*, *Storey* and *Mital* fail to teach at least the modular element features including the embedded cryptographic security codes as well as the digital coupon features of amended claims 3 and 37. The Examiner cites *Goldhaber* solely for disclosing an

icon for a digital coupon. Like *Sirbu et al.*, *Storey* and *Mital*, *Goldhaber* does not teach or suggest the modular element features of the claimed invention. One of ordinary skill in the art would not have been motivated to combine the teaching of *Goldhaber* with that of *Sirbu et al.*, *Storey* and *Mital*, but even if that were to happen, the resulting combination nonetheless fails to teach or suggest every element of the claimed invention. Accordingly, the Examiner has failed to establish a prima facie case of obviousness and claims 26 and 53 must be allowed.

Claims 3, 12-15, 17-22, 37, 39-42, and 44-49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of U.S. Patent No. 5,855,007 to *Jovicic et al.* in view of *Mital*. Again, none of the cited references teach or suggest an electronic commerce system having a plurality of modular elements as required by the claimed invention. Further, none of the cited references teach or suggest embedding a cryptographic security code within each of the modular elements to protect the individual integrity of the modular element. Moreover, none of the cited references teach or suggest that at least one of the modular elements having a cryptographic security code embedded within the modular element is a digital coupon.

The Examiner asserts that *Sirbu et al.* disclose an electronic commerce system having features similar to the claimed invention. However, as discussed above, the Examiner admits that *Sirbu et al.* do not disclose, nor do they teach or suggest, that the message transmitted between the client computer and the server computer includes a plurality of modular elements. Further, *Sirbu et al.* clearly do not disclose that the integrity of each of the plurality of modular elements is individually protected by cryptographic security codes that are embedded within each of the modular elements, nor do *Sirbu et al.* disclose that at least one these modular elements is a digital coupon. To remedy the deficiencies of *Sirbu et al.*, the Examiner relies on *Jovicic et al.* and *Mital*.

The Examiner asserts that *Jovicic et al.* teach the use of payment instructions (i.e., a digital coupon) to attract customers while decreasing the time and effort needed for using a conventional coupon. This assertion and the *Jovicic et al.* reference, for that matter, are not even relevant to the claimed invention. *Jovicic et al.* disclose an electronic coupon communication system that overcomes deficiencies and disadvantages of paper coupon redemption systems. See, *Jovicic et al.*, Col. 2, Lines 20-22. To facilitate the electronic coupon communication system, *Jovicic et al.* disclose a centralized Internet Coupon Server similar in function to the clearing

house of a paper coupon redemption system. *See, Jovicic et al.*, Col. 3, Lines 16-21. To redeem an electronic coupon, *Jovicic et al.* disclose at column 7, lines 46-55 that a

person can select an electronic coupon 300 from the Internet Coupon Server 124, print out a hard copy and redeem it at the coupon redemption center 142 (retail outlet) or the user could send the coupon using electronic mail from the Internet Coupon Server 124 directly to the redemption center's general computing device connected into public computer network such as the Internet 122.

Thus, *Jovicic et al.* disclose a centralized coupon server wherein coupons can be printed and later manually redeemed or where electronic coupons can be sent, using electronic mail, to a redemption center via the centralized coupon server. However, *Jovicic et al.* do not disclose a client computer being programmed to transmit to a server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, wherein the order acceptance request includes a discrete message having a number of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, and wherein at least one of the modular elements is a digital coupon.

The Examiner asserts that *Mital* teaches a secured transaction system wherein the message transmitted between the client computer and the server computer includes a plurality of individually protected modular elements. As discussed above, the goods and service order, the payment instructions and the audit information disclosed by *Mital* are merely terms or conditions of the purchase. As such, they are not the modular elements required by the claimed invention. Thus, *Mital* does not teach or suggest individually protecting the integrity of modular elements by embedding cryptographic security codes within each of the modular elements as required by the claimed invention. Accordingly, even if one skilled in the art were to combine *Mital* with *Jovicic et al.* and *Sirbu et al.*, the resulting combination nonetheless does not teach or suggest the claimed invention. For these reasons, Applicants respectfully request that the rejection of claims 3, 12-15, 17-22, 37, 39-42, and 44-49 under 35 U.S.C § 103(a) be withdrawn.

Claims 23-25, 28-33, 50-52, and 55-60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Jovicic et al.* and *Mital* and further in view of U.S. Patent No. 5,710,886 to *Christensen et al.* The Examiner primarily relies on *Sirbu et al.*, *Jovicic et al.* and *Mital* for support of the rejection and therefore relies on *Christensen et al.* to remedy the deficiencies of *Sirbu et al.*, *Jovicic et al.* and *Mital*. Claims 23-25, 28-33, 50-52, and 55-60 depend either directly or indirectly from independent claims 3 and 37. As previously discussed,

*Sirbu et al.*, *Jovicic et al.* and *Mital* do not teach or suggest every element of the claimed invention as required by amended claims 3 and 37. Among the claimed elements not taught or suggested by *Sirbu et al.*, *Jovicic et al.* and *Mital* is an electronic commerce system having a plurality of modular elements having cryptographic security codes embedded within each of the modular elements to protect the individual integrity of each of the modular elements. *Christensen et al.* is cited merely for disclosing that a gift certificate is an equivalent item known in the art. *Christensen et al.* does not disclose the modular element features absent from *Sirbu et al.*, *Jovicic et al.* and *Mital*. Therefore, even if one of ordinary skill in the art would have been motivated to combine the teaching of *Christensen et al.* with that of *Sirbu et al.*, *Jovicic et al.* and *Mital* (a point not conceded by Applicants), the resulting combination nonetheless fails to teach or suggest every element of the claimed invention. As such, the Examiner has failed to establish a prima facie case of obviousness and claims 23-25, 28-33, 50-52, and 55-60 must be allowed.

Claims 3, 13-15, 17-18, 20-22, 37, 40-42, 44-45 and 47-49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Goldhaber* and *Mital*. As discussed above, none of the cited references teach or suggest an electronic commerce system having a plurality of modular elements as required by the claimed invention. Further, none of the cited references teach or suggest embedding a cryptographic security code within each of the modular elements to protect the individual integrity of the modular element. Moreover, none of the cited references teach or suggest that at least one of the modular elements having a cryptographic security code embedded within the modular element is a digital coupon.

The Examiner asserts that *Sirbu et al.* disclose an electronic commerce system having features similar to the claimed invention. However, as previously discussed, the Examiner admits that *Sirbu et al.* do not disclose, nor do they teach or suggest, that the message transmitted between the client computer and the server computer includes a plurality of modular elements. Further, *Sirbu et al.* clearly do not disclose that the integrity of each of the plurality of modular elements is individually protected by cryptographic security codes that are embedded within each of the modular elements, nor do *Sirbu et al.* disclose that at least one these modular elements is a digital coupon. To remedy the deficiencies of *Sirbu et al.*, the Examiner relies on *Goldhaber* and *Mital*.

The Examiner asserts that *Goldhaber* teaches the use of service information (i.e., a digital coupon) to get a customer's attention. As discussed with respect to *Jovicic et al.*, this assertion



and the *Goldhaber* reference, for that matter, are not even relevant to the claimed invention. *Goldhaber* discloses an "attention brokerage" which is defined as the business of buying and selling a consumer's attention, thereby allowing advertisers to compete for certain consumers' attention. See, *Goldhaber*, Col. 4, Lines 41-46. As part of the attention brokerage, *Goldhaber* discloses that advertisers may pay a consumer directly for their time, or that an advertiser may offer a consumer a coupon. See, *Goldhaber*, Col. 4, Lines 49-59. Applicants question why one skilled in the art would look to an attention brokerage, as disclosed by *Goldhaber*, when working with an electronic commerce system for processing order acceptance request and order acceptance responses as required by the claimed invention. Furthermore, even if one were to combine *Goldhaber* with *Sirbu et al.*, the resulting combination nonetheless does not teach or suggest that the order acceptance request and the order acceptance response each include discrete messages having modular elements whose individual integrity is protected by cryptographic security codes embedded within each modular element.

The Examiner asserts that *Mital* teaches a secured transaction system wherein the message transmitted between the client computer and the server computer includes a plurality of individually protected modular elements. As discussed above, this assertion is incorrect because the goods and service order, the payment instructions and the audit information disclosed by *Mital* are merely terms or conditions of the purchase. As such, they are not the modular elements required by the claimed invention. Thus, *Mital* does not teach or suggest individually protecting the integrity of modular elements by embedding cryptographic security codes within each of the modular elements as required by the claimed invention. Even if one skilled in the art were to combine *Mital* with *Goldhaber* and *Sirbu et al.*, the claimed invention does not result. For these reasons, Applicants respectfully request that the rejection of claims 3, 13-15, 17-18, 20-22, 37, 40-42, 44-45 and 47-49 under 35 U.S.C § 103(a) be withdrawn.

Further, claims 23, 26-27, 50, and 53-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sirbu et al.* in view of *Goldhaber* and *Mital* and further in view of *Christensen et al.* *Sirbu et al.*, *Goldhaber* and *Mital* are the primary references supporting the Examiner's rejection. Claims 23, 26-27, 50, and 53-54 depend either directly or indirectly from independent claims 3 and 37. As discussed above, *Sirbu et al.*, *Goldhaber* and *Mital* fail to teach at least the modular element features including the embedded cryptographic security codes as well as the digital coupon features of amended claims 3 and 37. The Examiner cites *Christensen et al.*

solely for disclosing that a gift certificate is an equivalent item known in the art. Like *Sirbu et al.*, *Goldhaber and Mital*, *Christensen et al.* does not teach or suggest the modular element features of the claimed invention. Applicants do not acknowledge that one of ordinary skill in the art would have been motivated to combine the teaching of *Christensen et al.* with that of *Sirbu et al.*, *Goldhaber and Mital*, but even if that were to happen, the resulting combination nonetheless fails to teach or suggest every element of the claimed invention. Accordingly, the Examiner has failed to establish a prima facie case of obviousness and claims 23, 26-27, 50, and 53-54 must be allowed.

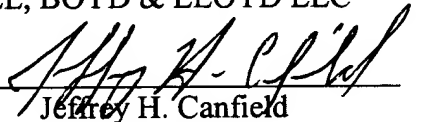
In light of the present amendments and the preceding remarks, Applicants submit that all of the pending claims are in condition for allowance and request that the Examiner allow the application to issue. However, if there are any remaining issues the Examiner is encourage to call Applicants' attorney, Jeffrey H. Canfield at (312) 807-4233 in order to facilitate a speedy disposition of the present case.

If any additional fees are required in connection with this response, they may be charged to deposit account no. 02-1818.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



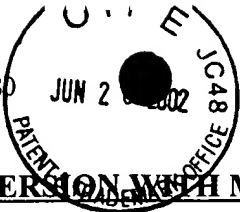
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In the Claims:**

Claims 3 and 37 have been amended as follows:

3. (Thrice Amended) An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individually integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individually integrity is protected by embedding cryptographic security codes within each of the modular elements.

37. (Thrice Amended) A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the

order acceptance request comprising a discrete message that includes a plurality of modular elements whose individually integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individually integrity is protected by cryptographic security codes embedded within each of the modular elements.